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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/068,343

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George P. Vella-Coleiro

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03/29/2006

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EXAMINER

KUMAR, PANKAJ

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 03/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/068,343	Applicant(s) VELLA-COLEIRO, GEORGE P.	
	Examiner Pankaj Kumar	Art Unit 2611	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 17 March 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires _____ months from the mailing date of the final rejection.
 b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☒ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: claim 29. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☒ Applicant's reply has overcome the following rejection(s): 26.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: 26.
 Claim(s) objected to: 3-6, 11-14 and 17-20.
 Claim(s) rejected: 1, 2, 7-10, 15, 16 and 21-25.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.
 12. ☒ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
 13. ☐ Other: _____.

Pankaj Kumar

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1. Applicant's arguments filed 3/22/2006 have been fully considered but they are partially persuasive and partially not persuasive.

2. Applicant argues that the prior action should not have been made final since the rejection of new claim 26 amounts to a new rejection of claim 3. In response, there was a typo in the prior action as claim 26 was accidentally analyzed with different limitations. After further consideration, claim 26 is allowed.

3. Applicant argues that the prior action should not have been made final since the rejection of new claim 27 amounts to a new rejection of claim 17. This is not persuasive for a number of reasons: First, claim 27 is missing the limitation to generate a main output signal from the input signal as recited, in part, in claim 16 which is parent to claim 17. Although claim 27 recites, in part, that it is applying pre-distortion to the input signal to generate a main output signal, this does not necessarily mean the same as generating a main output signal FROM the input signal (emphasis added). Second, claim 27 is missing at least one more limitation such as receiving an input signal which was in the set of claims from which claim 17 depends. Third, the fact that there are different claims was thought to mean that the claims have different meaning/scope.

4. The amendment submitted will not be entered since there is at least new claim 29. Although new claim 28 would be allowable if the amendment was entered as it is dependent on an allowed claim 26, the amendment can only be entered in its entirety or not at all. Since at least one reason the amendment is not being entered because of new claim 29, the amendment in its entirety will not be entered and thus claim 28 will not be allowable since it will not be entered.

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5. Applicant argues that Danielson has nothing to do with predistortion. This is not persuasive. Danielson's title of the invention which recites predistortion.

6. Applicant argues that the cited portion of Danielson does not have predistortion. This is not persuasive since the Danielson's title recites predistortion, the entirety of Danielson is related to predistortion.

7. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

8. Applicant's arguments and affidavit devote many pages to the argument that Moriyama does not teach frequency dependent phase predistortion since Moriyama teaches frequency independent phase predistortion. This is not persuasive for a number of reasons. First, even if one follows applicant's reasoning, there are still two other references cited for the same claim(s) (Andrews and Blauvelt) which each teach frequency dependent phase predistortion as noted in the prior action. In the many pages of arguments and affidavit, applicant does not argue against Andrews and Blauvelt teaching frequency dependent phase predistortion. Second, applicant cites various sections of Moriyama to purportedly teach frequency independence since frequency dependence is not mentioned like referring to fig. 62 showing dependence on power. This is not

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persuasive since just because sections of Moriyama show other dependence, such dependence does not preclude an extra dependence, such as frequency dependence, from existing.

9. Third, applicant argues that the sections cited by the office to show frequency dependence related to offset compensation for orthogonal modulators rather than frequency dependent phase pre-distortion for an amplifier. This is not persuasive for a number of reasons. First, applicant agrees on page 8 of its argument that “Moriyama teaches ... phase pre-distortion” and applicant agrees on page 9 first full paragraph that Moriyama recites “difference frequency” (hence frequency dependence) albeit for an orthogonal modulator. But the orthogonal modulator is part of the distortion system of Moriyama (Moriyama’s abstract first sentence: “This invention relates to a radio apparatus equipped with a distortion compensating function”). And Moriyama is amplifying the predistorted signal with i.e. figs. 1, 9-15, 17-18, 22-23, etc: 127, fig. 6: 30 Hence, Moriyama teaches frequency dependent phase pre-distortion for an amplifier.

10. Second, the rejection is based on a combination of references, and as applicant agrees that Moriyama teaches frequency dependence (i.e. applicant citing in his argument on page 9), and other references teach phase predistortion, it would be obvious to combine references as recited in the prior action.

11. Third, the Moriyama section cited in the prior action relates to a particular embodiment which is different than the embodiments cited by the applicant.

12. Applicant argues that since Blauvelt deals with two parallel predistortion paths and Danielsons deals with a single predistortion path, there is no suggestion to combine the two references. This is not persuasive for a number of reasons. First, duplicating the predistortion path can be done which would provide a greater advantage of having better error handling as

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mentioned in the prior action. Second, the suggestion to combine was provided in the prior action. Third, as explained above that even though bodily incorporation of duplicating the predistortion path can be done, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

13. Applicant argues that the suggestion to combine cited in Danielson relates to removing dependence on digital data or to equalization rather than predistortion. This is not persuasive. First, as Danielson's title has predistortion, the element of Danielson are to predistortion. Second, Danielson col. 2 lines 22-24 is a full paragraph discussing the advantage of having error handling and this full paragraph does not mention anything about digital data or equalization. Third, as Danielson's next paragraph discusses digital data, even if one followed applicant's argument that the cited section relates to removing dependence on digital data (or even equalization as applicant argues even though equalization is not mentioned in this section of Danielson), applicant's argument becomes non sequitur when applicant argues against predistortion as Danielson as a whole is to predistortion. As mentioned earlier, Danielson's title has predistortion and the elements that Danielson has relate to predistortion.

14. Applicant argues that fig. 16 of Danielson does not teach predistortion as that term is known and used by those skilled in the art. Is the applicant implying that by Danielson's title having predistortion, that Danielson is not skilled in the art? As applicant claims predistortion

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and Danielson was shown to teach predistortion through out its patent, Danielson teaches applicant's claims as discussed earlier.